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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/636,286	08/10/2000	Robert Arthur Giddings	RD-27,791	7072

7590 03/06/2003

Phillip D. Freedman
ATTORNEY AT LAW
6000 Wescott Hills Way
Alexandria, VA 22315-4747

EXAMINER

HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 03/06/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/636,286

Applicant(s)

GIDDINGS ET AL.

Examiner

John Hoffmann

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 10-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Election/Restrictions

Applicant's election with traverse of Group I in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the search for one group encompasses a search for the other groups and that the search can be made without serious burden. This is not found persuasive because these are mere allegations with no rationale or evidence to support them. The restriction of 2.3.03 constitutes a prima facie showing of serious burden. It is applicants burden to refute the showing. A mere allegation of no serious burden is insufficient.

The requirement is still deemed proper and is therefore made FINAL.

Claims 10-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 7.

Specification

The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Dietzsch 4078909

Figure 1, and col. 2, line 11 disclose the invention. As to “a gas atmosphere”, it is noted that there is no conjunction or other phrase prior to “a gas atmosphere”. The broadest reasonable interpretation is “*optionally within a gas atmosphere.*”; this is clearly met. Alternatively, the air around the Dietzsch apparatus is comprised of nitrogen (a carrier gas) and oxygen (an oxidizing gas).

Claim 2 requires a lining made from a member of a group of materials. It is noted that the claim does not recite that the material is selected from the group that “consists of” the members. It is deemed that the group is open to additional members - specifically the group of anti-corrosion metals. See col. 7, lines 22-25 - it is clear that Dietzsch discloses the group of the claim.

As to claim 4, the ambient atmosphere contains varying amounts of water vapor.

Claims 5-6 are clearly met.

Claim 7: a tube is nothing more than a hollow rod.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Blankenship 5059229.

Col. 5, lines 26 and 34 teach the carrier gas (Applicant's claim 3) and the oxidizing gas, respectively. Figure 4 shows the feeding of the SiO₂ material (41) into a furnace. 33 is the melting zone with the fused (molten) material. The fiber 46 is clearly being drawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhatti 4404009.

Bhatti doesn't disclose a "melting zone". It would have been obvious to have a zone where the glass is melted, because one needs a source of molten glass. As to the supplying of a generally SiO₂ material: Bhatti does not disclose what type of glass is used. It would have been obvious to use a silica-based glass, because silica/sand is a common, inexpensive material as compared to other types of glass. Common silica glass is deemed to read on "a generally SiO₂ material" because it comprises silica. It is inherent that it was fed to furnace. As per Applicant's page 1, lines 5-6 ("other glass like

materials"), line 24 ("the molten glass"), and page 3 (lines 29-31), it is deemed that Applicant does not intend for claim 1 to be limited to pure silica. The "fused quartz" limitation of the preamble is interpreted as "comprising fused quartz", i.e. previously melted silica.

As to the fusing step: it is clear the material is fused (i.e. melted). As to "a gas atmosphere", it is noted that there is no conjunction or other phrase prior to "a gas atmosphere". The broadest reasonable interpretation is "with an optional gas atmosphere"; this is clearly met. Alternatively, the air around the Bhatti apparatus is inherently comprised of nitrogen (a carrier gas) and oxygen (an oxidizing gas).

Figure 1 shows the forming of the article.

Claim 2 refers to "said melt zone" since there is no antecedent basis for this, it is interpreted as "a melt zone". This is interpreted to mean: a zone that contains a melt. Section 12 of figure 1 is at least part of the zone. AS to the "walls", there is only one wall 14 (col. 3, line 47). IT would have been obvious to have many fiber forming bushings (walls) as possible on the Bhatti furnace so as to make as much fiber as possible. All of the walls together compromise at least part of the melt zone.

Looking at figure 3 and col. 2, lines 34 to col. 3, line 22, there is disclosed that the walls have an inner lining 70 of rhenium (for instant claim 9) and outer linings (76) of osmium, iridium, and platinum.

Claim 8: See col. 3, line 14 which teaches a material comprised of molybdenum.

Conclusion

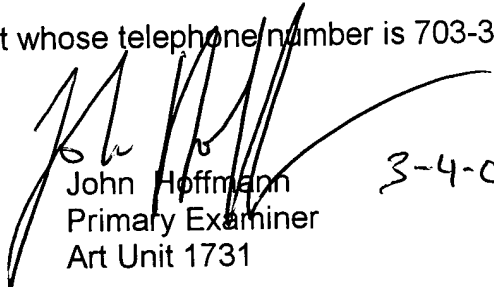
Whereas the Office routinely searches the entire disclosed invention, the present claims are extremely broad and preclude a reasonable search in its entirety. It appears to Examiner that the use of rhenium is the heart of the invention. This is the only portion of the invention has been searched completely.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bewlay, Nayak, Palmquist, Boettner, Antczak, Siemans, Yokokawa, Meerman, UK Post Office, Allan, and Coucoulas are cited as being relevant to Applicant's disclosed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 703-308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7115 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.


John Hoffmann
Primary Examiner
Art Unit 1731

3-4-03